

## **STATEMENT OF LEGAL AND FACTUAL BASIS**

Liberty Fabrics, Inc.  
Woolwine, Patrick County, Virginia  
Permit No. VA-30328

Permit Date: September 5, 2001

Registration No. 30328  
AIRS ID No. 51-141-0002

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Liberty Fabrics, Inc. has applied for a Title V Operating Permit for its textile manufacturing plant at Woolwine in Patrick County. The Department has reviewed the application and has prepared a draft Title V Operating Permit.

### **FACILITY INFORMATION**

#### Permittee

Liberty Fabrics, Inc.  
P.O. Box 7  
Woolwine, VA 24185

#### Facility

Liberty Fabrics, Inc.  
P.O. Box 7  
Va. Route 8, one mile south of Woolwine  
Woolwine, VA 24185

### **SOURCE DESCRIPTION**

SIC Code: 2258 - Warp knit fabric mills.

This textile manufacturing plant knits, dyes and finishes fabrics, primarily producing stretch textile synthetic fabrics. The finished product is shipped out as bolts (rolls) of fabric. The plant

is located in Patrick County one mile south of Woolwine on Virginia route 8 at its intersection with route 618.

In general, the manufacturing process consists of knitting, dyeing, and finishing to produce stretch fabric. Finishing includes two tenter frames, both controlled by a single fume eliminator and stack, the plant's only add-on control device, which primarily is to control opacity. The knitting process has no emissions. Dyeing operations at this plant are generally quite low in HAP and volatile organic compound content, so emissions are under the insignificant amount.

There are three fuel burning equipment units as listed below. They create most of the plant's emissions:

Boiler B-2, Cleaver Brooks 39.336 mm Btu/hr capacity, burns #2 and #6 fuel oil. B-2 is subject to 40 CFR 60 Subpart Dc (NSPS Dc), must sample oil sulfur content when each #6 F.O. shipment is received, must operate an opacity CEM, needs fuel oil vendor certifications with each distillate oil shipment, and is subject to reporting.

Boiler B-3, B& W 14.4 mm Btu/hr input capacity, also burns #2 and #6 fuel oil. B-3 is a pre-1972 boiler that is not subject to NSPS.

Hot oil heater A (H-A), 12.5 mm Btu/hr capacity, burns only #2 F.O. (no #6 F.O.). H-A is subject to 40 CFR 60 Subpart Dc (NSPS Dc), which includes fuel oil vendor certifications with each distillate oil shipment, and reporting requirements.

The facility is a Title V major source of SO<sub>2</sub> from fuel oil burning equipment. The SO<sub>2</sub> PTE is 152 tons/yr, based on the permit's long term fuel oil limits of 0.5% sulfur for each of the two boilers and one hot oil heater. This source is located in an attainment area for all pollutants, and is not a PSD major source. The facility was previously permitted under new source review (NSR) Permits issued on April 10, 1992 and July 31, 1992, both modified on March 31, 1998. Except for NSPS Dc being applicable to two units as noted above, no MACT (40 CFR 63), NESHAP (40 CFR 61), etc. is applicable to this facility at this writing in December, 2000.

## **COMPLIANCE STATUS**

The facility is inspected at least once per year. The facility is in compliance with the State Air Pollution Control Board Regulations.

## **EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION**

The emissions units at this facility consist of the following :

**The plant has two boilers (B-2 & B-3) and one hot oil heater A (H-A) as follows:**

**Boiler B-2, 1992 Cleaver-Brooks**, 39.336 million Btu/hr input capacity, fired with distillate or residual fuel oil, new source installed per new source review (NSR) permit 7-31-92 as modified 3-31-98. 40 CFR 60 Subpart Dc (NSPS Dc) does apply. NSPS Dc requires the Continuous Opacity Monitoring System (COMS). Emissions are primarily SO<sub>2</sub> and NO<sub>x</sub>.

*The fuel oil sulfur content for this boiler is limited to a maximum of 0.5 percent by weight as a 30 day rolling average per 40 CFR 60 Subpart Dc and the 7-31-92 NSR permit, and except for startup, shall not exceed 0.5 percent by weight when the B & W boiler (boiler No. 3) is operating simultaneously with this boiler.*

**Boiler B-3, pre-1972 Babcox & Wilcox (B & W)**, 14.4 million Btu/hr input capacity, fired with distillate or residual fuel oil, existing source prior to 1972, subject to some conditions in 7-31-92 NSR permit as modified 3-31-98, not subject to NSPS. Emissions are primarily SO<sub>2</sub> and NO<sub>x</sub>.

The fuel oil sulfur content for boiler B3 is limited per 7-31-92 NSR permit to 0.8 wt % maximum except 0.5% maximum when boilers B-2 and B-3 are operating simultaneously.

**H-A, 1992 Hot oil heater A**, 12.5 million Btu/hr input capacity, fired only with distillate fuel oil (no residual oil), new source installed per new source review (NSR) permit 4-10-92 as modified 3-31-98, 40 CFR 60 Subpart Dc (NSPS Dc) does apply. Emissions are primarily SO<sub>2</sub> and NO<sub>x</sub>.

The fuel oil sulfur content is limited to 0.5 wt % maximum by meeting distillate fuel oil national standards per 4-10-92 NSR permit and NSPS Dc.

### **Processes with emissions are:**

**Finishing** at this plant applies finishing material to the fabric and includes **two Tenter Frames (TF-1 & TF-2)** which perform processes on the fabric that include drying, stretching, and heat setting the fabric. The tenter frames are the plant's principal process emission source. They emit PM and opacity, VOC and HAPS due to temperatures as high as the 280<sup>0</sup>F to 400<sup>0</sup>F that evaporate part of the finishing oils and waxes, etc., primarily from the surface of the fabric. Particulate emissions from both tenter frames are controlled by a single CVM fume eliminator to control opacity. It has a single stack. This is the plant's only add-on air pollution control device. TF-2 is a new source installed per the 4-10-92 permit as modified 3-31-98. This permit also places conditions on pre-1972 existing source TF-1.

Dyehouse DH-1 accomplishes most dyeing operations. It uses acetic acid to set water soluble chemicals that are generally quite low in HAP and volatile organic compound content. Dyeing at this plant has a PTE of 3 tons/yr, which is less than the 5 tons/yr significant amount.

### EMISSIONS INVENTORY

Emissions are summarized in the following tables.

1997 Actual Emissions from Title V permit application.

Emission Unit	Criteria Pollutant Emission in Tons/Year				
	VOC	CO	SO <sub>2</sub>	PM-10	NO <sub>x</sub>
B-2, Cleaver Brooks Boiler, 39.336 mm.	0.6	2.2	34.3	2.1	24.0
B-3, B & W Boiler, 14.4 mm.	-0-	-0-	-0-	-0-	-0-
H-A, Hot oil Heater A, 12.5 mm.	-0-	0.7	1.7	0.1	7.8
TF-1, Tenter Frame #1	4.6	-	-	2.6	-
TF-2, Tenter Frame #2	6.7	-	-	4.0	-
Total	11.9	2.9	36.0	8.8	31.8

1997 Facility Hazardous Air Pollutant Emissions from Title V permit application.

Pollutant	Hazardous Air Pollutant Emission in Tons/Year
Total HAPS*, total plant.	less than 1 ton/yr
* The application lists all HAPS emissions as originating from burning fuel oil.	

**EMISSION UNIT APPLICABLE REQUIREMENTS - for refr. B-2, boiler #2, Cleaver**

**Brooks 39.336 million Btu/hr 1992 boiler, 40 CFR 60 Subpart Dc (NSPS Dc)** applies, fired with #2 or #6 fuel oil with sulfur content limits, installed per 7-31-92 NSR permit as modified 3-31-98.

**Limitations:**

1. Fuel is limited to #2 and residual fuel oil per 7-31-92 NSRPC 4 (the facility's option chosen to meet NSPS Dc sulfur requirements).
2. Residual oil sulfur content 0.5wt% maximum 30 day rolling average, #2 F.O. 0.5% per shipment, per NSPS Dc, state BACT, and 7-31-92 NSRPC 11.
3. The sulfur content of residual fuel oil in this boiler *shall not exceed 0.5 percent* whenever the #3 boiler, refr B-3, is fired simultaneously, per 7-31-92 NSRPC 11 to meet modeling for the SO<sub>2</sub> NAAQS. See #10 in the streamlining section below for an explanation about removing from this Title V permit the short term (less than 30 day average) 0.8% sulfur fuel oil condition.
4. 2,496,981 gal/yr fuel oil per 7-31-92 new source review permit condition (**NSRPC**) 3, equals hourly rated capacity times 8760 hrs/yr.
5. Visible emissions 20% opacity except for one six minute period/hr of 27% per NSPS Dc and 7-31-92 NSRPC 6.
6. Lbs/hr (**pph**) and tons/yr (**tpy**) emission limits for several criteria pollutants. The largest limits are 91.5 tpy SO<sub>2</sub>, 64.1 tpy NO<sub>x</sub>, and 9.1 tpy TSP. The tpy emission limits are the federal emission factors times rated capacity times 8760 hrs/yr. The pph emission limits are the yearly divided by 8760 hours/yr. All represent state BACT. Re: 7-31-92 NSRPC 5.
7. 15 meters minimum stack height from base elevation for this boiler per modeling for SO<sub>2</sub> NAAQS. Re: 7-31-92 NSRPC 2.

**Monitoring and Recordkeeping:**

The permit includes requirements for maintaining records of all monitoring and testing required by the permit. These records include:

1. Distillate fuel oil (#2 F.O.) and its maximum 0.5% sulfur per vendor fuel certifications with each fuel shipment and certification recordkeeping per NSPS Dc and 7-31-92 NSRPC 10.
2. Residual F.O. maximum 0.5% sulfur 30 day rolling averages per sampling on-site fuel and measure its sulfur content after each shipment is received per NSPS Dc and 7-31-92 NSRPC 9.
3. Daily and yearly fuel consumption for this unit per NSPS Dc, 7-31-92 NSRPC 13 and EPA title V policy.
4. Visible emissions monitored by Continuous Opacity Monitoring System (COMS) = (Continuous Emission Monitor = CEM) per NSPS Dc and 7-31-92 NSRPC 7.
5. Short term emission limits are met by federal emission factors times rated capacity. Per EPA title V policy and 7-31-92 NSRPC 13.

6. 15 meters stack height per permanent stack installation several years ago, no further monitoring needed beyond yearly inspection noting if there is a change. Per 7-31-92 NSRPC 2.
7. Record of this boiler's operating hours, including the hours of simultaneous operation with boiler #3, B-3, per 7-31-92 NSRPC 13.
8. Criteria pollutant emission rates calculated monthly from federal emission factors and latest 12 month fuel consumption records. Except for opacity, the emission limits are met by meeting the limitations on the fuel types, quality and throughput.

**Testing:** Not required.

The permit does not require source tests. A table of test methods has been included in the permit if testing is performed. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

**Reporting:**

1. Quarterly reports are required to EPA and to DEQ per NSPS Dc for fuel reporting requirements for both distillate and residual fuel oil for this boiler. For consistency, the 7-31-92 and title V permits require the NSPS opacity CEM reports quarterly to EPA and DEQ, instead of sometimes quarterly and other times semi-annually. For consistency, the title V monitoring reports to DEQ for the remaining monitoring for this emissions unit are also required by this title V permit quarterly, within 30 days after each calendar quarter ends, instead of sometimes quarterly and other times semi-annually.

**EMISSION UNIT APPLICABLE REQUIREMENTS - for refr. B-3, boiler #3, B & W 14.4 million Btu/hr pre-1972 boiler, non-NSPS, fired with #2 or #6 fuel oil with sulfur content limits, installed per 4-10-92 NSR permit as modified 3-31-98, some conditions apply from the B-2 NSR permit of 7-31-92 as modified 3-31-98.**

**Limitations:**

1. Fuel for this boiler is limited to #2 and residual fuel oil per 7-31-92 NSRPC 4 and facility's choice.
2. Fuel oil maximum sulfur content for this boiler is 0.8wt%, except 0.5% when boiler #2, B-2, Cleaver Brooks boiler, is fired simultaneously, per 7-31-92 NSRPC 11 per modeling for SO<sub>2</sub> NAAQS.
3. Visible emissions 20% opacity except for one six minute period/hr of 60% per existing source regulation 9 VAC 5-40-940.
4. Emission limits of 0.54 lbs/million Btu for TSP and for PM-10, and 2.64 lbs/million Btu for SO<sub>2</sub> per existing source regulation 9-VAC 5-40-880 (but permit fuel limits are much cleaner than this).

**Monitoring and Recordkeeping:**

The permit includes requirements for maintaining records of all monitoring and testing required by the permit. These records include:

1. Distillate fuel oil (#2 F.O.) and its maximum 0.5% sulfur per vendor fuel certifications with each fuel shipment and certification recordkeeping per 7-31-92 NSRPC 10.
2. Residual F.O. maximum 0.8% and 0.5% sulfur content per sampling on-site fuel and measure sulfur content after each shipment per 7-31-92 NSRPC 9.
3. Daily fuel consumption for this unit per 7-31-92 NSRPC 8 and 13. Yearly are not required by the permit because there are no emission limits for these time periods for this pre-1972 existing source, only a pounds/MM Btu applicable requirement.
4. Visible emissions periodic monitoring is required per the title V "Facility Wide" "Monitoring" condition. This requires a weekly observation to check for any visible emissions using 40 CFR 60 Appendix A Method 22 techniques. If any visible emission is observed, the condition shall be corrected and recorded, or a 40 CFR 60 Appendix A Method 9 visible emission evaluation performed to check compliance. Refr. 9 VAC 5-80-110 E. This is considered to be adequate for this fuel oil boiler.
5. Record of this boiler's operating hours, including the hours of simultaneous operation with boiler #2, B-2, per 7-31-92 NSRPC 13.
6. Except for opacity, the emission limits are met by meeting the limitations on the fuel types, quality and throughput.

**Testing:** Not required.

The permit does not require source tests. A table of test methods has been included in the permit if testing is performed. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

**Reporting:**

1. For consistency and because of common sulfur information requirements and common fuel tanks, the 7-31-92 and title V permits require the same fuel reports and same quarterly report timing to DEQ as for boilers #2 and H-A. For consistency, the title V monitoring reports to DEQ for the remaining monitoring for this emissions unit are also required by this title V permit quarterly, within 30 days after the end of each calendar quarter, instead of sometimes quarterly and other times semi-annually.

**EMISSION UNIT APPLICABLE REQUIREMENTS - for refr. H-A, hot oil Heater A, 12.5 million Btu/hr, 1992 installation, NSPS Dc is applicable, fired with only #2 fuel oil limited to 0.5% sulfur (no residual fuel oil), installed per 4-10-92 NSR permit as modified 3-31-98.**

**Limitations:**

1. Fuel is limited to #2 fuel oil per 4-10-92 new source review permit condition (NSRPC) 14 (the option chosen to meet NSPS Dc sulfur requirements).
2. Oil sulfur content 0.5wt% maximum per shipment per NSPS Dc, 4-10-92 NSRPC 15, and state BACT.
3. 793,478 gal/yr fuel oil per 4-10-92 (NSRPC) 3, equals hourly rated capacity times 8760 hrs/yr.
4. Visible emissions 10% except for one six minute period/hr of 20% per 4-10-92 NSRPC 12 and more than satisfies NSPS Dc.
5. Lbs/hr (pph) and tons/yr (tpy) emission limits for several criteria pollutants. The largest limits are 27.7 tpy SO<sub>2</sub> and 7.7 tpy NO<sub>x</sub>. The tpy emission limits are the federal emission factors times rated capacity times 8760 hrs/yr. The hourly are the yearly divided by 8760 hours/yr. Re 4-10-92 NSRPC 6. All represent state BACT.

**Monitoring and Recordkeeping:**

The permit includes requirements for maintaining records of all monitoring and testing required by the permit. These records include:

1. Distillate fuel oil (#2 F.O.) and its maximum 0.5% sulfur per vendor fuel certifications with each fuel shipment and certification recordkeeping per NSPS Dc, 4-10-92 NSRPC 1 and 2.
2. Daily and yearly fuel consumption for this unit per NSPS Dc, 4-10-92 NSRPC 17 and EPA title V policy.
3. Visible emissions periodic monitoring is required per the Title V "Facility Wide" "Monitoring" condition. This requires a weekly observation to check for any visible emissions using 40 CFR 60 Appendix A Method 22 techniques. If any visible emission is observed, the condition shall be corrected and recorded, or a 40 CFR 60 Appendix A Method 9 visible emission evaluation performed to check compliance. Refr. 9 VAC 5-80-110 E. This is considered to be adequate for this distillate fuel oil fuel burning equipment.
4. Criteria pollutant emission rates calculated monthly from federal emission factors and latest 12 month fuel consumption records. Short term emission limits are met by federal emission factors times rated capacity. Per EPA title V policy and 4-10-92 NSRPC 17.
5. Except for opacity, the emission limits are met by meeting the limitations on the fuel type, quality and throughput.

**Testing:** Not required.

The permit does not require source tests. A table of test methods has been included in the permit



if testing is performed. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

**Reporting:**

1. Quarterly reports are required to EPA and to DEQ per NSPS Dc and 4-10-92 NSRPC 18 for fuel quality reports for distillate fuel oil for this boiler. For consistency, the title V monitoring reports to DEQ for the remaining monitoring for this emissions unit are also required by this title V permit quarterly, within 30 days after the end of each calendar quarter, instead of sometimes quarterly and other times semi-annually.

**EMISSION UNIT APPLICABLE REQUIREMENTS - for refr. TF-1 and TF-2, Tenter Frames #1 and #2**, non-NSPS, non-MACT, etc.. TF-2 was constructed per 4-10-92 NSR permit, that permit also covers existing TF-1 due to a single CVM fume eliminator controlling opacity from both tenter frames, single stack from fume eliminator, rated capacities for TF-1 and TF-2 are 9,417 and 8,760 tons/yr and 3,000 and 2,000 lbs/hr fabric respectively.

**Limitations:**

1. Particulate (and therefore opacity) and VOC emissions from the two tenter frames shall be controlled by a fume eliminator, per 4-10-92 NSRPC 5 and 6, for opacity compliance and TF-2 BACT.
2. Emissions from TF-1 are limited by existing source regulation 9 VAC 5-40-260 to 5.4 pph and 18.8 tpy TSP and PM-10, based on 8760 hrs/yr operation.
3. Emissions from TF-2 are limited by 4-10-92 NSRPC 9 for BACT to 4.0 pph and 17.4 tpy VOC, and 0.016 grain/dscf, 2.9 pph and 12.6 tpy TSP and PM-10, based on 8760 hrs/yr operation.
4. Visible emissions from the fume eliminator controlling Tenter Frames #1 and #2 are limited to 10% opacity, except for one six minute period/hr of 30% opacity per 4-10-92 NSRPC 11 and TF-2 BACT.
5. Throughput of TF-1 shall not exceed 9,417 tons/yr fabric per title V 9 VAC 5-80-110. The annual is the long term average rated capacity.
6. Throughput of TF-2 shall not exceed 8,760 tons/yr fabric per title V 9 VAC 5-80-110. The annual is the long term average rated capacity.

**Monitoring and Recordkeeping:**

The permit includes requirements for maintaining records of all monitoring and testing required by the permit. These records include:

1. Visible emissions periodic monitoring is required per the title V "Facility Wide" "Monitoring" condition. This requires a weekly observation to check for any visible emissions using 40 CFR 60 Appendix A Method 22 techniques. If any visible emission is observed, the

condition shall be corrected and recorded, or a 40 CFR 60 Appendix A Method 9 visible emission evaluation performed to check opacity compliance. Refr. 9 VAC 5-80-110 E. This is considered to be adequate monitoring for visible emissions from tenter frames #1 and #2.

2. Title V periodic monitoring and recordkeeping for VOC emissions shall include recordkeeping of the throughput of VOC that is emitted from the tenter frame processes and monitoring for proper operation of the CVM fume mist eliminator. Proper fume eliminator operation is assured by weekly logging the pressure drop across the packed glass fiber coalescing filter section, annual internal inspection of the fume eliminator, weekly observations for continuing lack of or minimal visible emissions from the fume eliminator, and additional internal inspections of the fume eliminator if and when it exceeds 5 percent opacity as a six minute average. VOC emission rate compliance for the fume eliminator was verified after startup of the #2 tenter frame, the only one with a VOC limit. In practice, the fume eliminator has been very reliable and has rarely allowed any visible emission to get through it, which indicates excellent performance.

Actual VOC emissions are calculated by the following equation:

Actual VOC emissions = (Throughput rate of VOC that is emitted by the tenter frame processes) x (100% - 50% control efficiency = 50% through to atmosphere).

3. Title V periodic monitoring and recordkeeping for TSP and PM-10 emissions include (a) recordkeeping of throughput amounts and identification of the relevant materials and their particulate emission factors for the respective different tenter frame modes of operation, and the resulting particulate emission amounts before CVM collection per spreadsheets for the tenter frame processes, and (b) monitoring for proper operation of the CVM fume mist eliminator. Proper fume eliminator operation is assured by weekly logging the pressure drop across the packed glass fiber coalescing filter section, annual internal inspection of the fume eliminator, weekly observations for continuing lack of visible emissions from the fume eliminator, and additional inspections of the fume eliminator if and when it exceeds 5 percent opacity as a six minute average. Particulate emission rate compliance for the CVM fume mist eliminator was verified after startup of the #2 tenter frame, the one with the tightest PM emission limit due to BACT. In practice, the fume eliminator has been very reliable and has rarely allowed any visible emission to get through it, which indicates excellent performance.

Actual TSP and PM-10 particulate emissions are calculated by the following equation:

Actual PM emissions = (Uncontrolled PM emission amounts from the tenter frame processes from spreadsheets) x (100% - 95% control efficiency = 5% through to atmosphere).

4. Particulate and VOC emission rates calculated monthly from throughputs, plant emission factors and CVM control efficiencies. Records shall include this information and the

equations used to calculate emissions. Per EPA title V policy and 4-10-92 NSRPC 17.

**Testing:** Not required.

The permit does not require source tests. A table of test methods has been included in the permit if testing is performed. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard. Tenter Frame #2 with CVM control device demonstrated compliance by stack test 10-20-92.

**Reporting:**

1. For consistency with the reports for boiler #2 and other fuel burning units, the title V monitoring reports to DEQ for monitoring these emissions units are required by this title V permit quarterly, within 30 days after the end of each calendar quarter, instead of sometimes quarterly and other times semi-annually.

**STREAMLINED REQUIREMENTS**

Streamlining 1: NSPS Dc gives more than one option to meet the residual fuel oil requirements. For the NSPS Dc Cleaver Brooks 39.336 mm boiler B-2, the option chosen for residual fuel oil is for the residual oil to meet a 0.5wt% sulfur content limit as daily 30 day averages determined by on-site fuel sampling. The requirements are streamlined out for other NSPS Dc sulfur options, such as FGD scrubbing combined with SO<sub>2</sub> CEM monitoring of SO<sub>2</sub> scrubbing efficiency.

Streamlining 2: The 9 VAC 5-50-80 20% opacity limit, except for one six minute period in any one hour of not more than 30% opacity, is streamlined out by the more restrictive 10% opacity limit, except for one six minute period in any one hour of not more than 30% opacity, requirement of the 4-10-92 NSR permit for tenter frame TF-2.

Streamlining 3: The 9 VAC 5-40-80 20% opacity limit, except for one six minute period in any one hour of not more than 60% opacity, is streamlined out by the more restrictive 10% opacity limit, except for one six minute period in any one hour of not more than 30% opacity, requirement of the 4-10-92 NSR permit for tenter frame TF-1.

Streamlining 4: The 9 VAC 5-50-80 20% opacity limit, except for one six minute period in any one hour of not more than 30% opacity, and the NSPS Dc 20% opacity limit, except for one six minute period in any one hour of not more than 27% opacity, are streamlined out by the more restrictive 10% opacity limit, except for one six minute period in any one hour of not more than 20% opacity, requirement of the 4-10-92 NSR permit for the hot oil heater, H-A.

Streamlining 5: The 9 VAC 5-50-80 20% opacity limit, except for one six minute period in any one hour of not more than 30% opacity, is streamlined out by the more restrictive 20% opacity

limit, except for one six minute period in any one hour of not more than 27% opacity, requirement of NSPS Dc for the Cleaver Brooks boiler B-2.

Streamlining 6: The 9 VAC 5-50-10 D equals 9 VAC 5-40-930 A 1 2.64 lbs SO<sub>2</sub>/million Btu requirement for the Cleaver Brooks boiler B-2 is streamlined to the more restrictive NSPS Dc, and the same 7-31-92 NSR permit limit, 0.5wt% sulfur fuel oil 30 day average, which is approximately 0.53 lbs SO<sub>2</sub>/million Btu for No. 6 fuel oil.

Streamlining 7: The 9 VAC 5-50-10 D equals 9 VAC 5-40-930 A 1 2.64 lbs SO<sub>2</sub>/million Btu requirement for the hot oil heater H-A is streamlined to the more restrictive NSPS Dc, and the same 4-10-92 NSR permit limit, 0.5wt% sulfur for distillate fuel oil, which is approximately 0.52 lbs SO<sub>2</sub>/million Btu for No. 2 fuel oil.

Streamlining 8: Condition # 17 of the 7-31-92 NSR permit is streamlined out because it is obsolete due to the referenced boiler to be replaced having been physically removed years ago.

Streamlining 9: The conditions in the 4-10-92 and 7-31-92 NSR permits are streamlined out which deal with new equipment installation time frames and initial notifications and visible emissions evaluations because these conditions are obsolete due to having been completed for all permitted equipment.

*Streamlining 10: For boiler B-2, the 1992 Cleaver-Brooks 39.336 million Btu/hr oil boiler, this Title V permit is streamlining out (deleting) the 0.8 percent sulfur short term limit (shorter than the 30 day average), which is Condition # 11.b of the 7-31-92 NSR permit. The sulfur limit is therefore simplified to the more restrictive 40 CFR 60 Subpart Dc 0.5 percent as a 30 day average. This is being done because it is the option preferred by the applicant to meet, and to satisfy periodic monitoring to assure meeting, the 20.9 lbs/hr sulfur dioxide emission limit in condition # 5 of the 7-31-92 NSR permit. The 20.9 lbs/hr sulfur dioxide emission limit is based on 0.5% fuel oil firing at rated capacity.*

## **GENERAL CONDITIONS**

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110, that apply to all Federal operating permit sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions, including those caused by upsets, within four daytime business hours.

## **STATE ONLY APPLICABLE REQUIREMENTS**

The following Virginia Administrative Codes have specific requirements only enforceable by the

State and have been identified as applicable by the applicant:

NA - None are included in this Title V permit.

### **FUTURE APPLICABLE REQUIREMENTS**

NA.

### **INAPPLICABLE REQUIREMENTS**

9 VAC 5-40-260, standard for particulate matter emissions, does not apply to Dyehouse operations, refr. DH-1, because this wet process inherently has no particulate emissions.

### **COMPLIANCE PLAN**

NA because this facility is considered to be in compliance.

### **INSIGNIFICANT EMISSION UNITS**

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (5-80-720 B)	Rated Capacity (5-80-720 C)
DL-1	Dye Lab (QA/QC)	Named (5-80-720A)	VOC, HAP	Unknown
DM-1	Dye Mixing (up to 10 gal.)	Em. Level (5-80-720 B)	VOC, HAP	50 gal.
WK-1	Warping & Knitting	Em. Level	None	20,000 <i>tons</i> fabric/yr
FWP-1	Emergency Diesel Generator for Firewater Pump	Size (5-80-720 C)	VOC, HAP, PM, SO <sub>2</sub> , NO <sub>x</sub> , CO	182 hp
EG-1	Emergency Generator <i>using LPG engine</i>	Size	VOC, HAP, PM, SO <sub>2</sub> , NO <sub>x</sub> , CO	85 hp

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (5-80-720 B)	Rated Capacity (5-80-720 C)
MA-1	Maintenance Activities	Named	VOC, HAP, PM	Unknown
RW-1	Process Raw Water Treat	Named	None	Unknown
BW-1	Boiler Water Treatment	Named	None	Unknown
MC	Mobile Containers	Named	VOC, HAPS	Unknown
SD-1,2	Spin Dryers	Em Level	None	
FO-1,2	Fabric Openers	Em Level	None	14,125 tons/yr ea.
WW-1	Waste Water Treatment System	Named	VOC, HAP	0.4 MGD
WO-1	CVM Waste Oil Tank	Size	None	500 gal.

<sup>1</sup>The citation criteria for insignificant activities are as follows:

9 VAC 5-80-720 A - Listed (Named) Insignificant Activity, Not Included in Permit Application

9 VAC 5-80-720 B - Insignificant due to emission levels

9 VAC 5-80-720 C - Insignificant due to size or production rate

## CONFIDENTIAL INFORMATION

The permittee submitted a request for confidentiality concerning only the composition of dyehouse and finishing chemicals. All other portions of the Title V application are suitable for public review.

## PUBLIC PARTICIPATION

A public notice regarding the draft permit was published in the January 9, 2000 edition of the Martinsville Bulletin. Public comments were accepted from January 9, 2000 through February 9, 2000. The only comments received were the February 9, 2000 EPA Region III letter of comments. All of EPA's comments have been addressed in the permit and/or statement of basis. During EPA's 45 day review period for the proposed permit and SOB from 12-27-00 to 2-11-01, EPA e-mailed their acceptance on February 9, 2001 of the DEQ proposed changes to address the comments from the public comment period.

30328T5V.SOB.doc